

Figure 1

FIG. 2

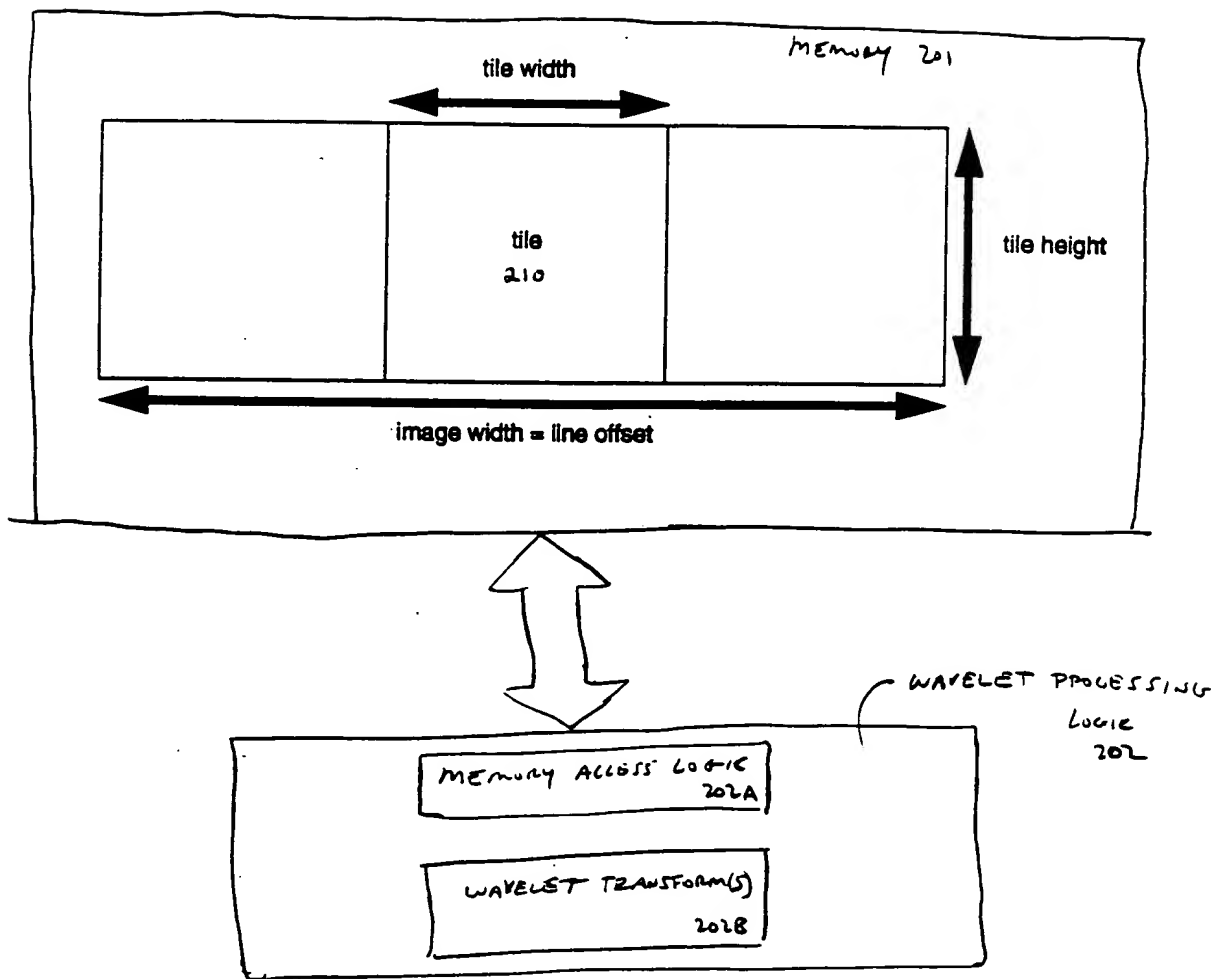


Figure 2

FIG. 3

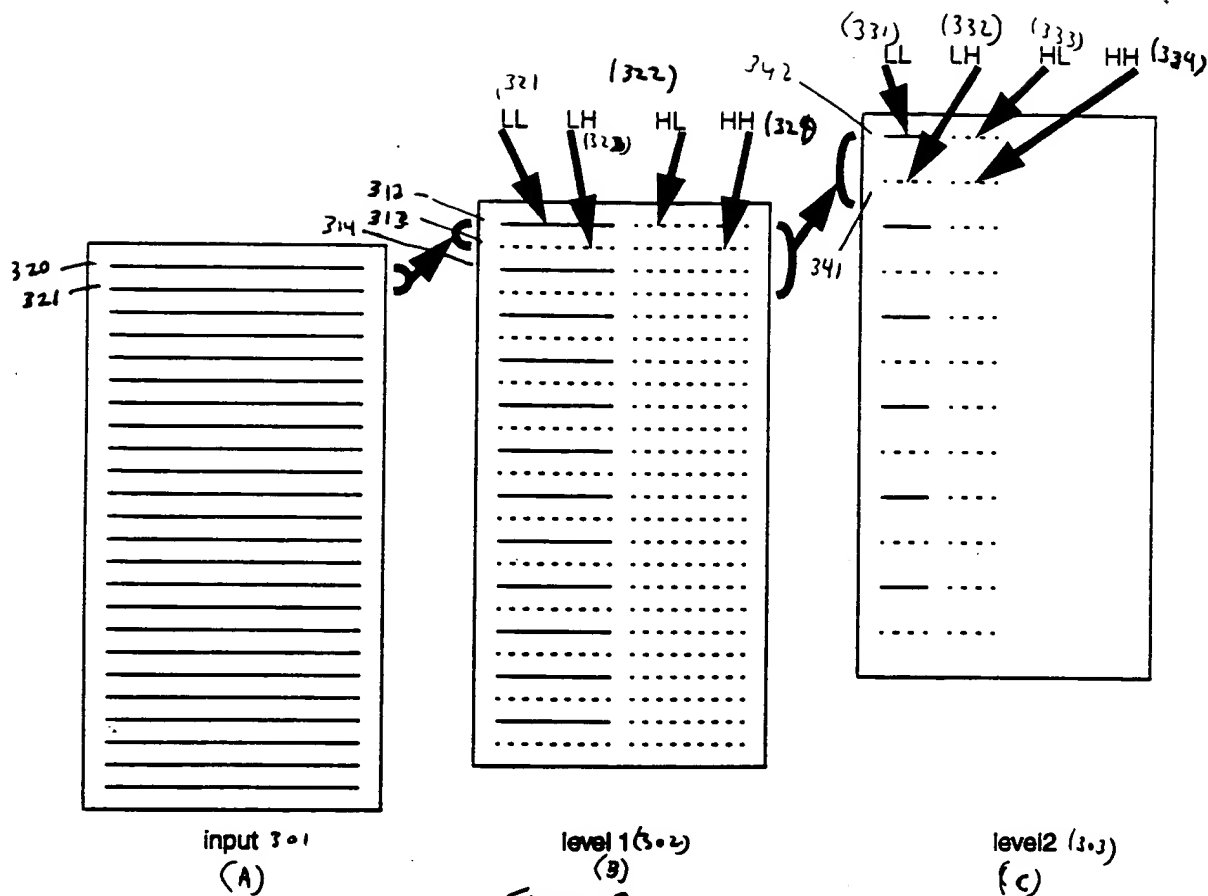


Figure 3

The diagram illustrates a three-level architecture. On the left, a box labeled 'level 2 (D)' contains four input arrows labeled LL, LH, HL, and HH pointing to a grid of horizontal lines. A curved arrow labeled 'C' points from level 2 to a central box labeled 'level 1 (E)'. This box contains a grid of horizontal lines with dots between them. Four input arrows labeled LL, LH, HL, and HH point to the top of this grid. A curved arrow labeled 'C' points from level 1 to a box on the right labeled 'output (F)', which contains a grid of horizontal lines.

level 1
(E)

The diagram illustrates a hierarchical tree structure. On the left, a vertical rectangle is divided into horizontal segments. The top segment is labeled '8'. Below it are two segments labeled '4' and '2'. A break symbol (two parallel diagonal lines) indicates a jump in the scale. Below the break are two more segments, with the first labeled 'height-2'. At the bottom, two segments are labeled '(2)' and '(-3)'. The total height is labeled 'height-2' on the left. The width is labeled 'width' at the bottom. To the right of the rectangle, four vertical arrows point upwards, labeled 'input', 'level 1', 'level 2', and 'level 3'. A bracket on the right side of the rectangle indicates a zoomed-in view of the bottom part of the structure. This view is shown in a rounded rectangle on the right, labeled '450'. Inside this rounded rectangle, a vertical rectangle is divided into horizontal segments. The top segment is labeled '4'. Below it are two segments labeled '2' and 'height/8'. The width is labeled 'width/8' at the bottom. To the right of this rectangle, four vertical arrows point upwards, labeled 'level 4', 'level 5', and 'level 6'. A bracket on the right side of the rounded rectangle indicates a zoomed-in view of the bottom part of the structure.

Figure 4 A

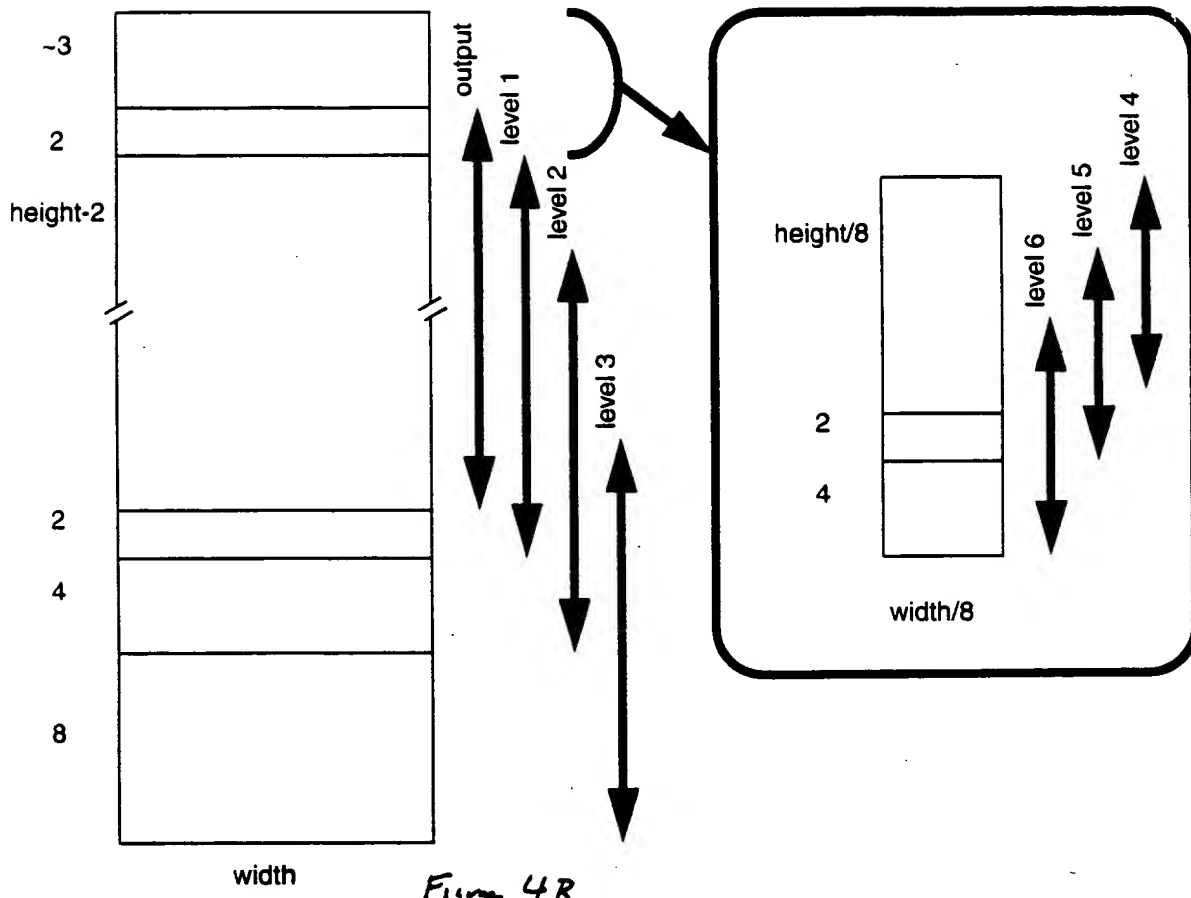


Figure 4B

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graph TD; Input["color input pixels (RGB) in raster order"] --> Tile["tile"]; Input --> Conv["color conversion and/or level shifting"]; Tile -- "image width - tile width" --> Mem["memory to store pixels"]; Tile -- "tile height" --> Mem; Mem --> Conv; Conv --> Buf1["coefficient buffer for one tile, one component (used by transform)"]; Conv --> Buf2["coefficient buffer for one tile, one component (used by transform)"]; Conv --> Buf3["coefficient buffer for one tile, one component (used by transform)"]; Buf1 --> CME["context model and entropy coder"]; Buf2 --> CME; Buf3 --> CME; CME --> CDM["coded data memory"];
```

The diagram illustrates the architecture of a video encoder. It starts with a color input of pixels (RGB) in raster order. This input is processed in tiles. A memory block stores pixels, with dimensions defined as image width minus tile width and tile height. The input also goes through a color conversion and/or level shifting block. The output of this block is then processed by three parallel coefficient buffers, each for one tile and one component, used by the transform. The outputs of these buffers are then processed by a context model and entropy coder, which finally outputs the coded data to the coded data memory.

Figure 5

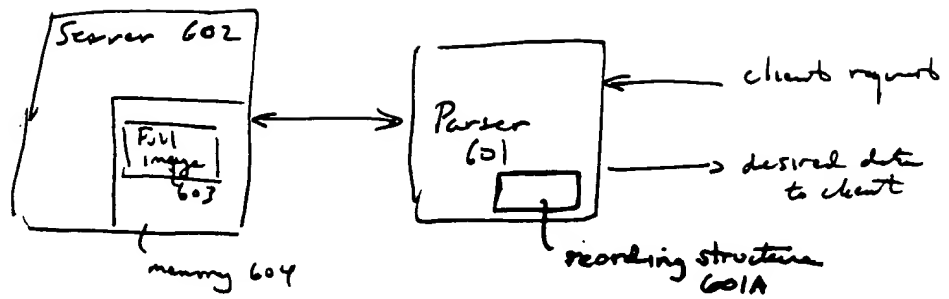


Figure 6A

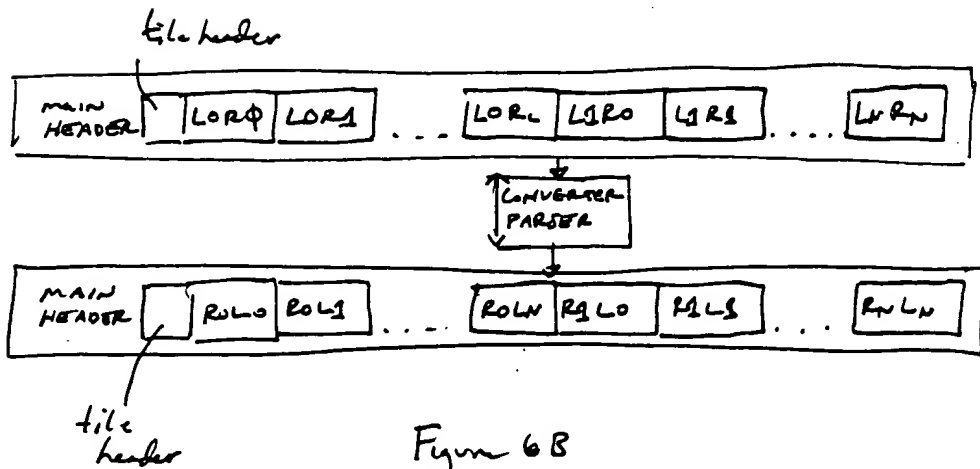


Figure 6B

Figure 7A

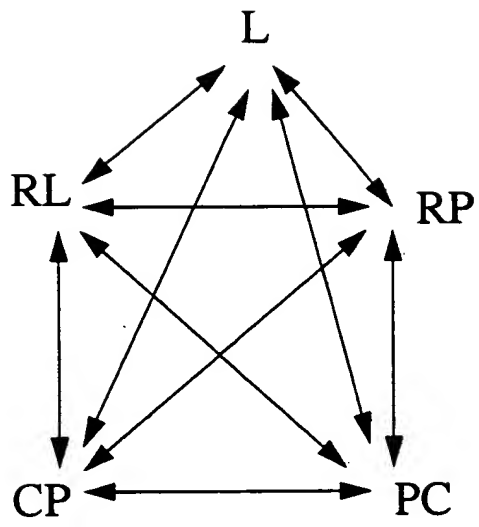


Figure 7A

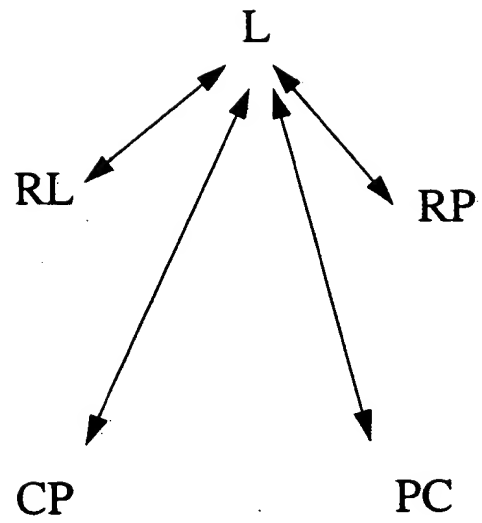


Figure 7B

```

graph TD
    801[BUILD LIST FROM HEADERS  
IN PACKETS] --> 802[mark (optionally) items  
for DELETION]
    802 --> 803[REORDER LIST TO MAP  
FIRST PROGRESSION TO  
SECOND PROGRESSION]
    803 --> 804[OUTPUT CODED DATA BASED  
ON REORDERED LIST]
  
```

Figure 8

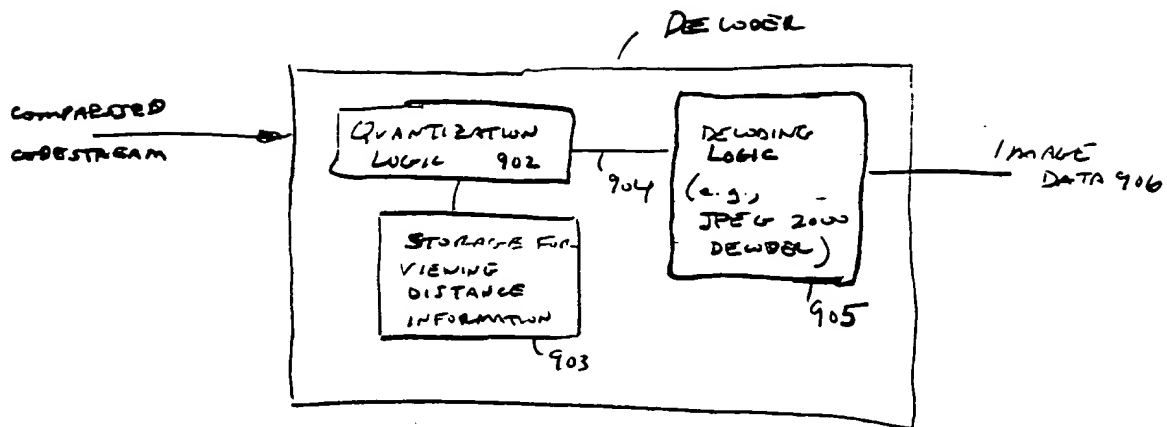


Figure 9

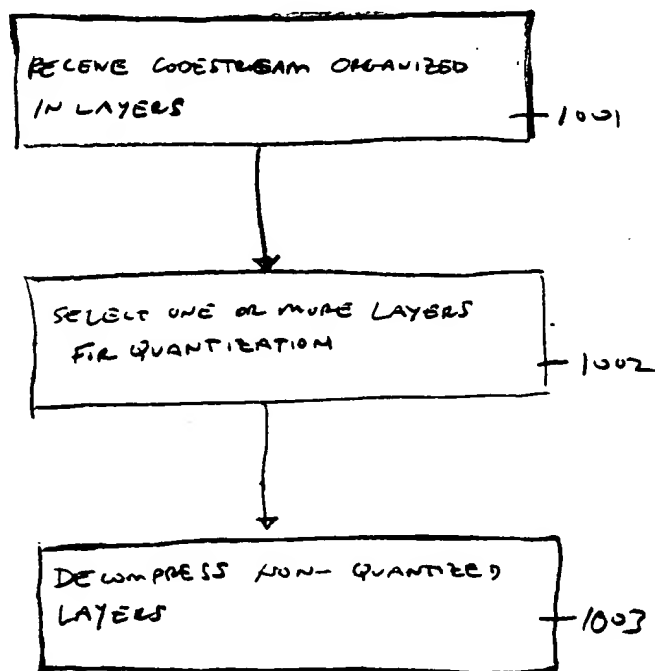


Figure 10

FIG. 9

11-4060-300000

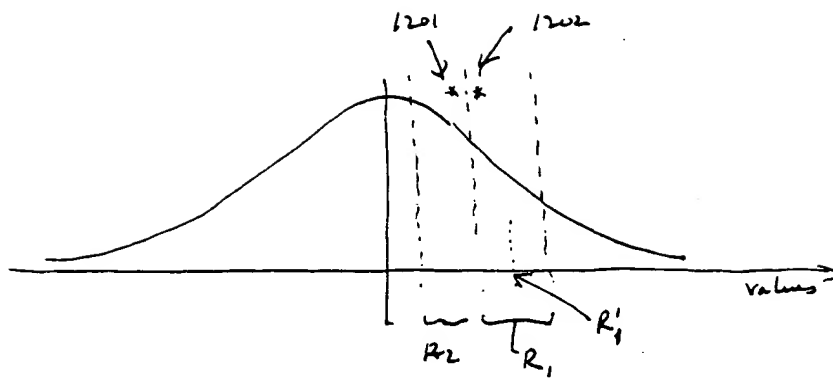


Figure 12

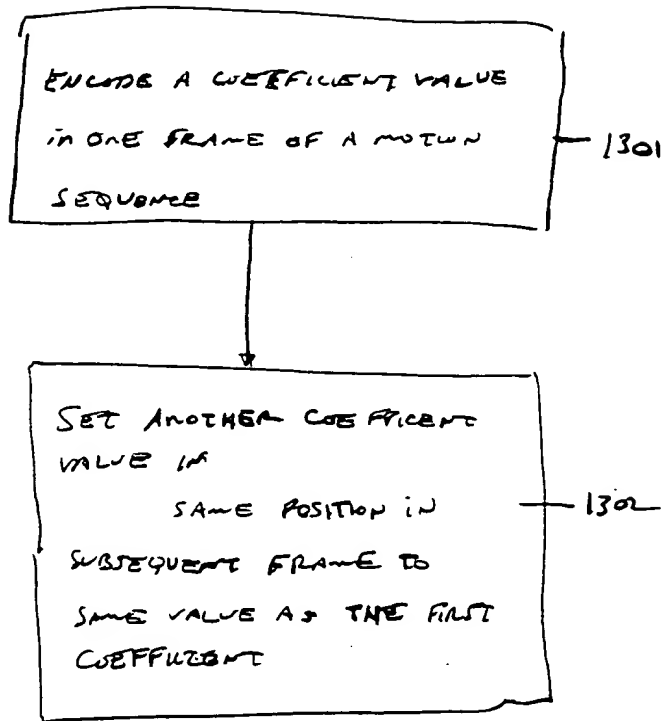


Fig 13

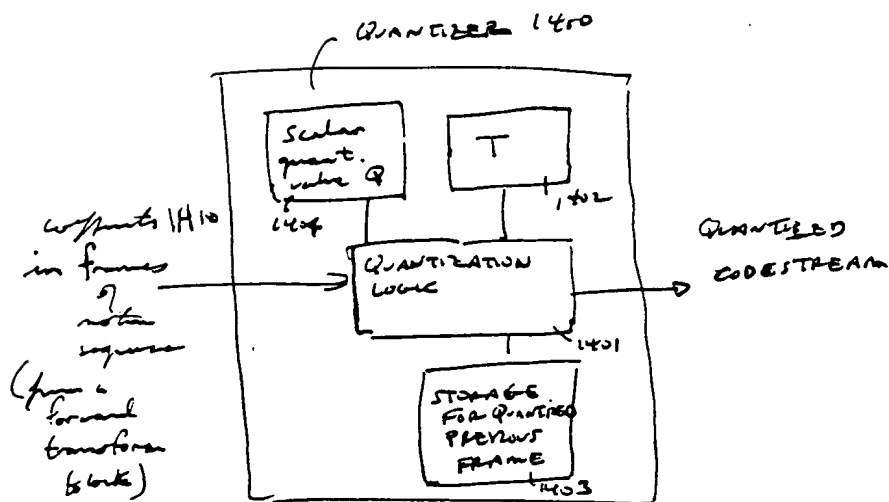


Figure 14

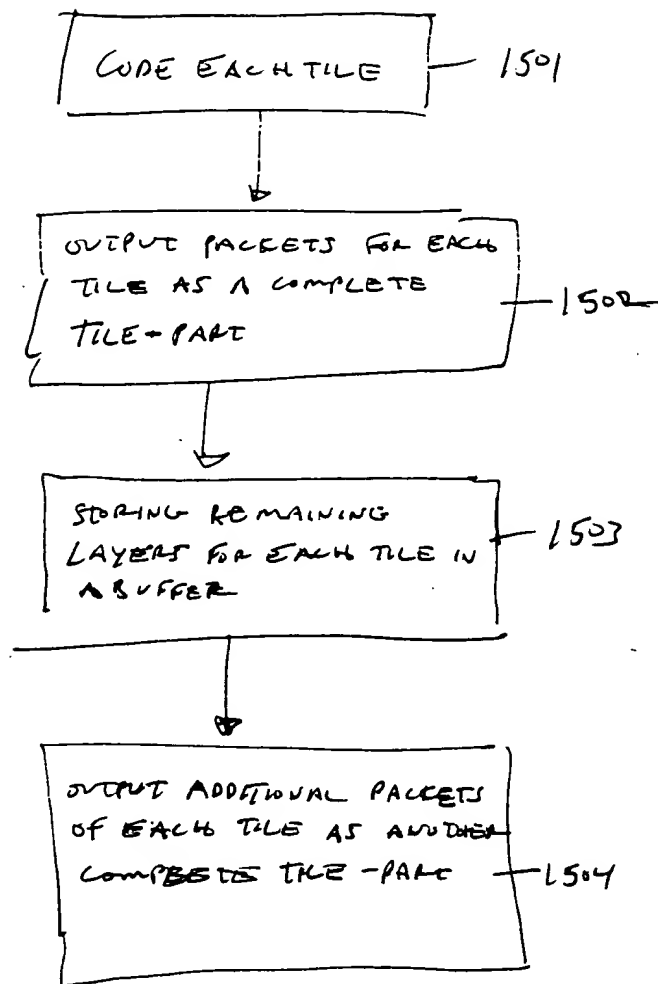


Figure 15 A

104050-2600000

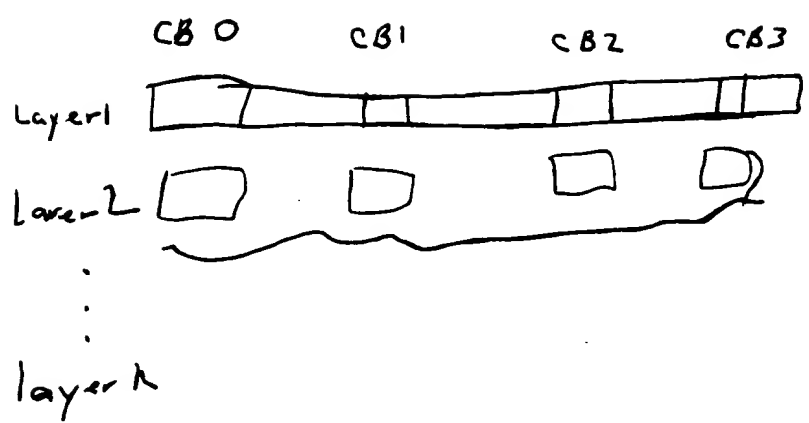


Fig 15B

1601 1602 1603 1604

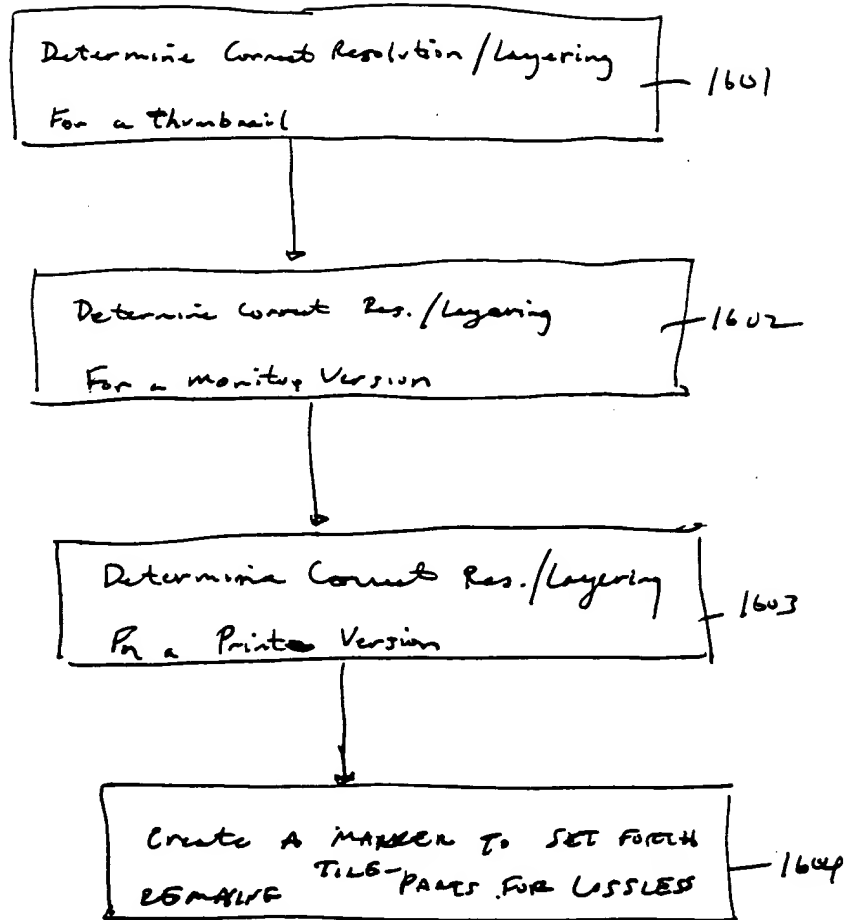
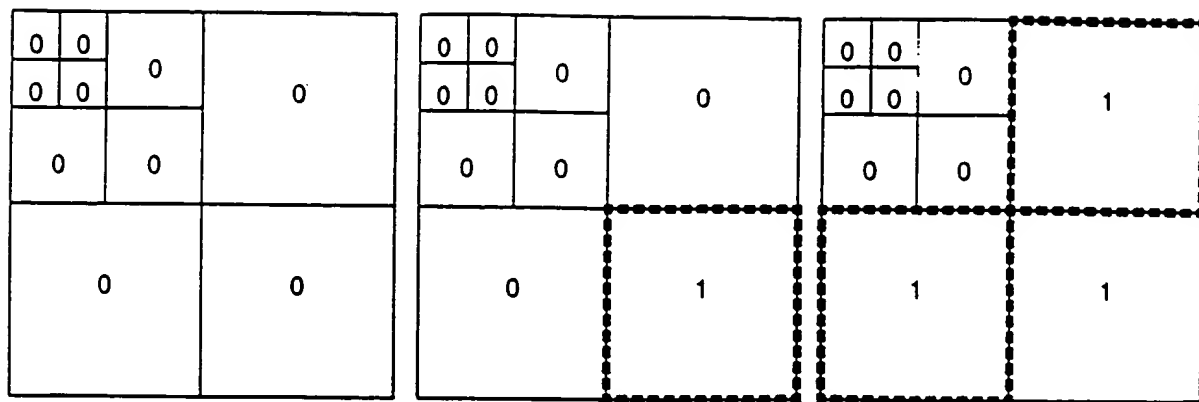


Figure 16

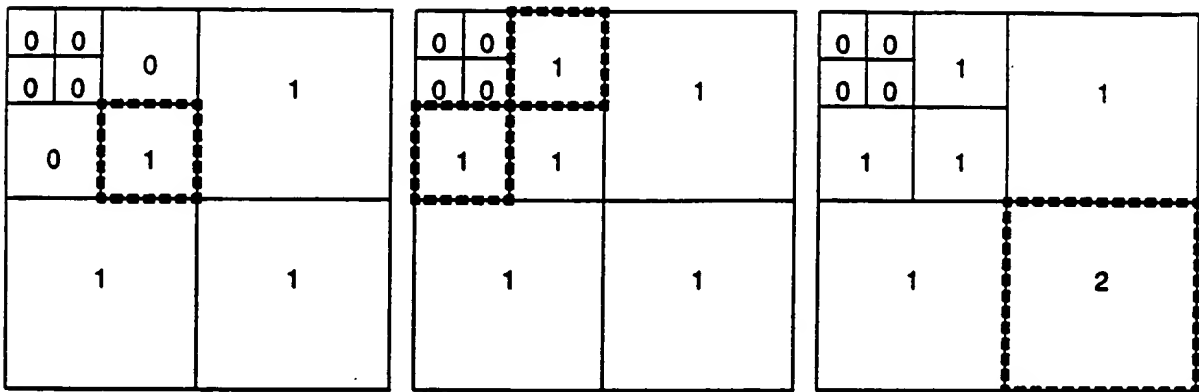
104050-2600000



A = lossless

B

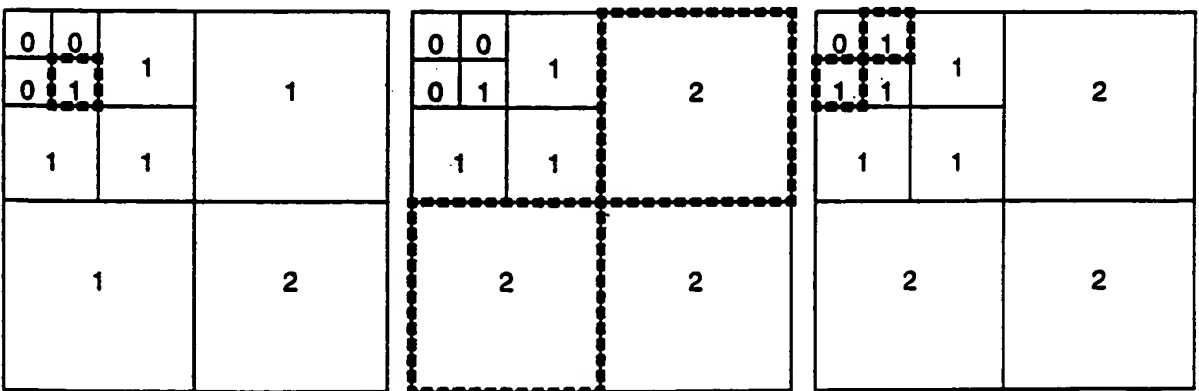
C



D

E

F



G

H

I

Figure 17

104060-2000000

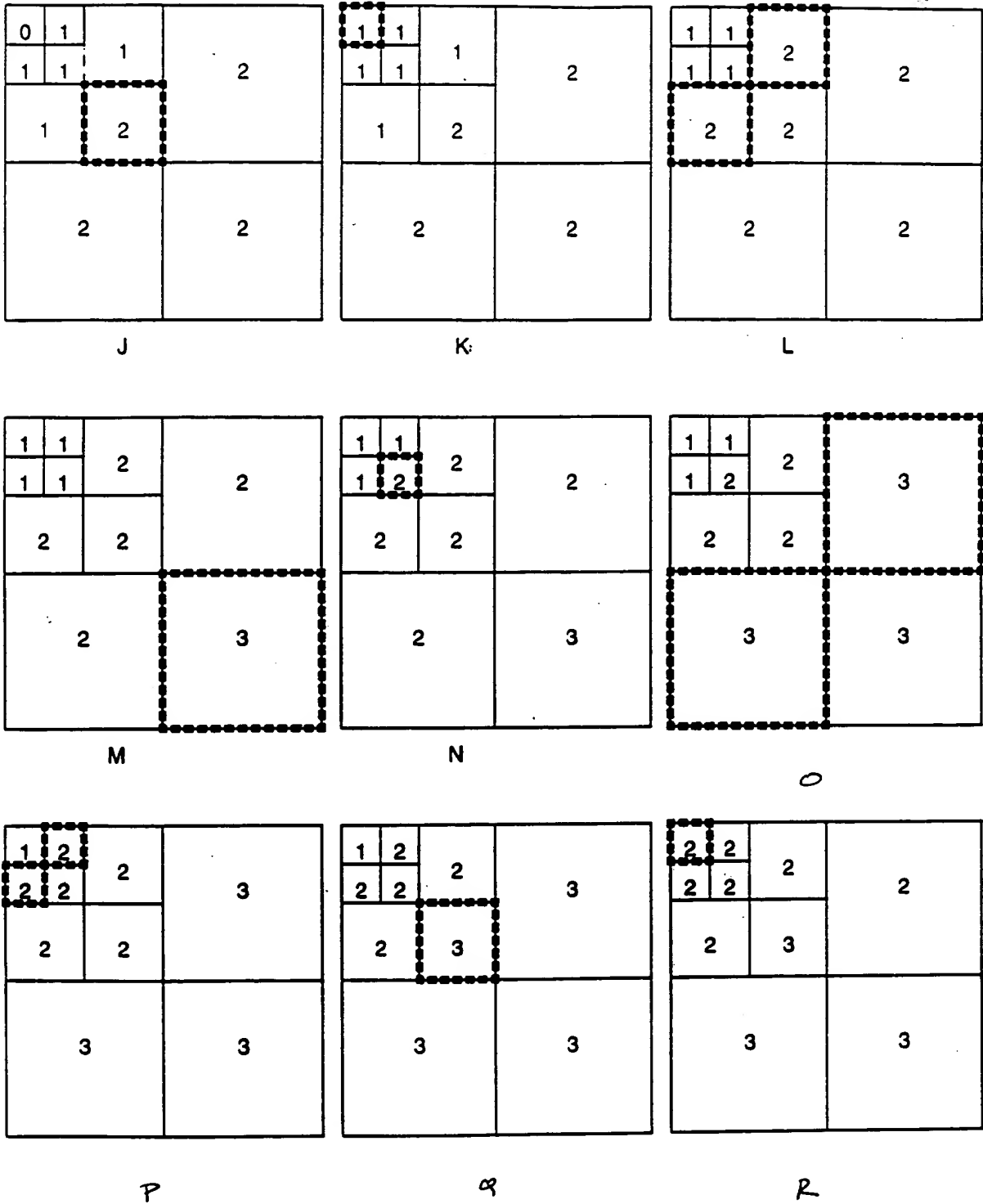


Figure 18



0	0	0	2	
0	0			
0		1	3	
2		3		

luminance

0	2	2	all	
2	2			
2		3	all	
4		all		

chrominance

0	2	2	all	
2	2			
2		3	all	
4		all		

chrominance

Figure 11

2000

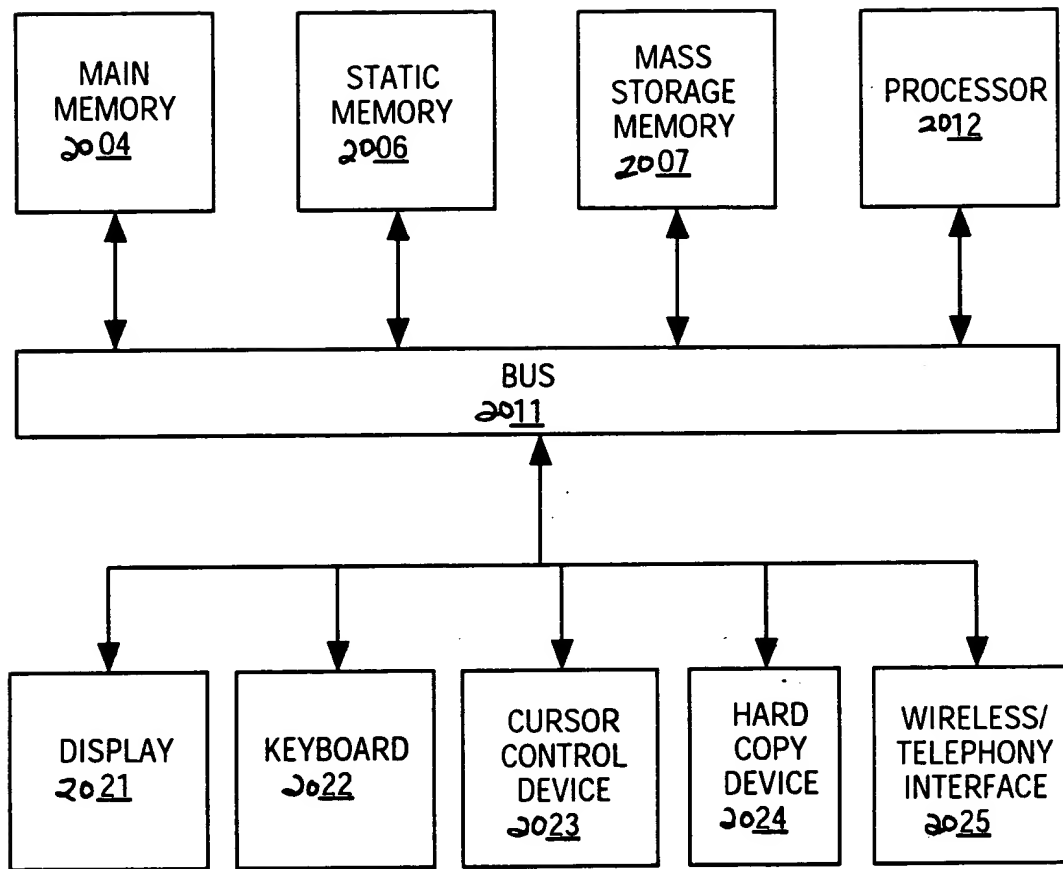


FIG. 20

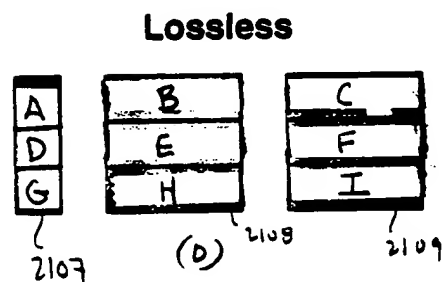
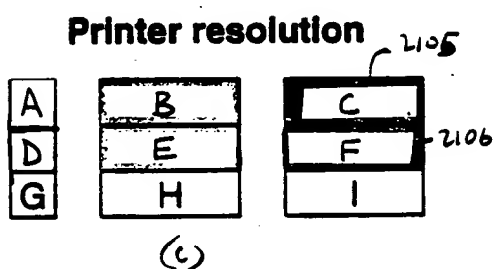
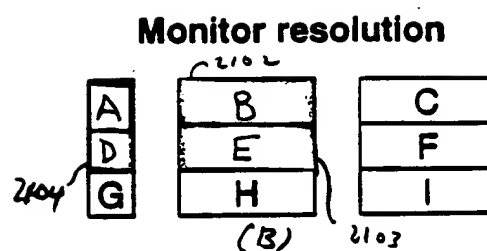
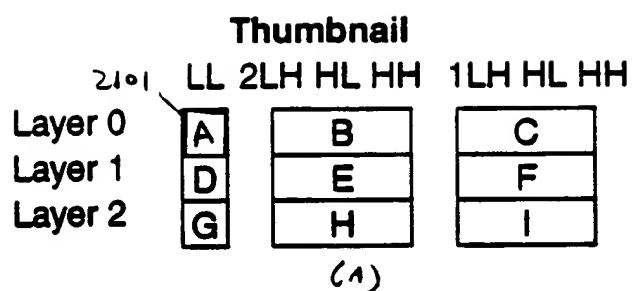


Figure 21

0	0	0	0	1	1	3	4	4	8
0	0	0	0	1	1	3	4	4	8
0	0	0	0	1	1	3	4	4	8
0	0	0	0	1	1	3	4	4	8
0	0	0	0	1	1	3	4	4	8
0	2	2	6	7	7	10	11	11	15
5	9	9	13	14	14	17	18	18	22
12	16	16	20	21	21	24	25	25	29
19	23	23	27	28	28	31	32	32	36
26	30	30	34	35	35	38	39	39	42
33	37	37	40	41	41	43	44	44	45
3LL	3HL	3LH	3HH	2HL	2LH	2HH	1HL	1LH	1HH

Figure 22

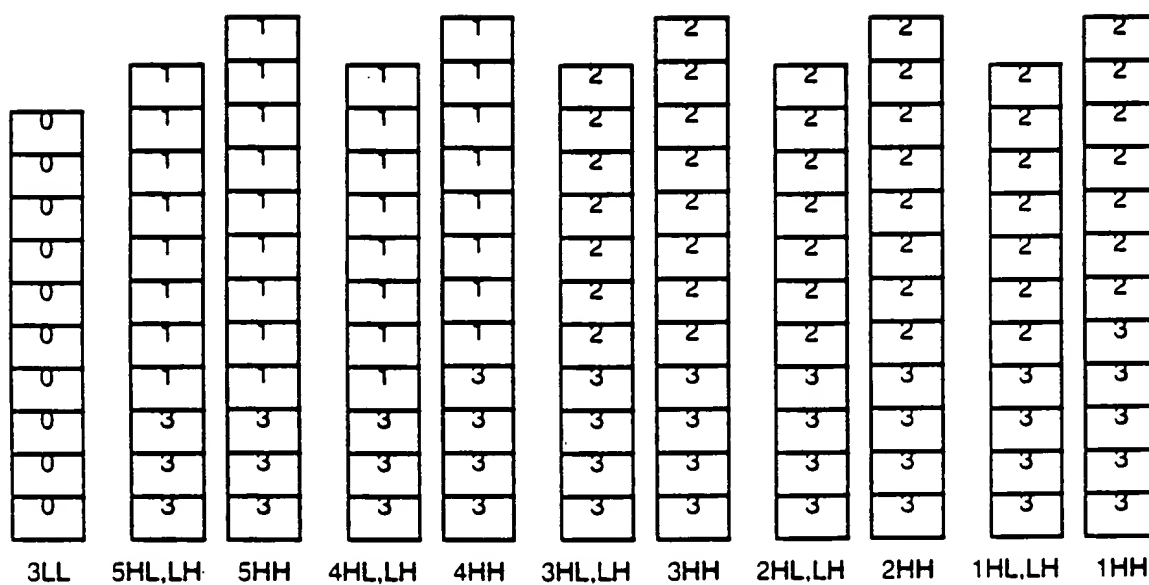


Fig. 23

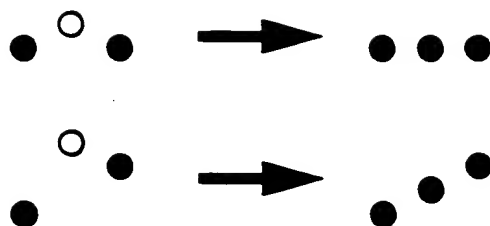
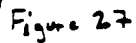
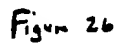
[illegible]

Fig 24

1. *What is the purpose of the study?*
 2. *What are the research questions or hypotheses?*
 3. *What is the study design?*
 4. *What is the sample size and how was it selected?*
 5. *What are the variables being studied?*
 6. *What are the data collection methods?*
 7. *What are the results of the study?*
 8. *What are the conclusions and implications of the study?*
 9. *What are the limitations of the study?*
 10. *What are the strengths of the study?*
 11. *What are the future research directions?*
 12. *What are the ethical considerations?*
 13. *What are the funding sources?*
 14. *What are the conflicts of interest?*
 15. *What are the acknowledgments?*
 16. *What are the references?*
 17. *What are the appendices?*
 18. *What are the footnotes?*
 19. *What are the tables and figures?*
 20. *What are the conclusions?*



1. The first step is to identify the problem. This involves understanding the current situation and what needs to be changed.

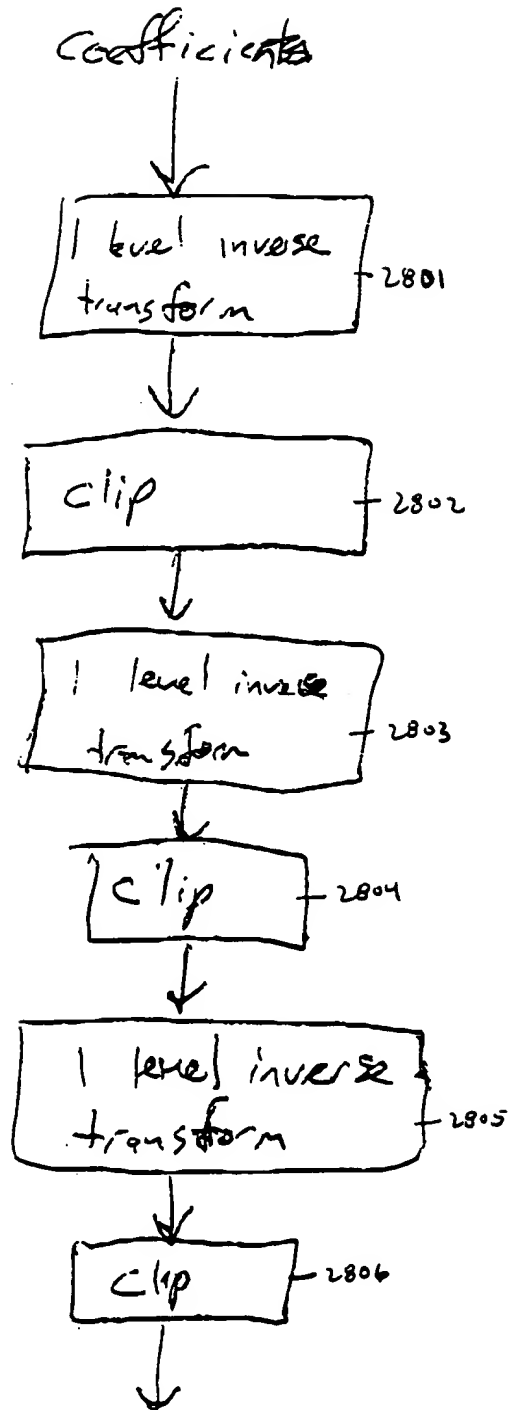


Figure 28